Message

From: Strauss, Linda [Strauss.Linda@epa.gov]
Sent: 5/26/2017 1:19:18 AM
To: Cleland-Hamnett, Wendy [Cleland-Hamnett.Wendy@epa.gov]
CC: Wise, Louise [Wise.Louise@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Schmit, Ryan [schmit.ryan@epa.gov]
Subject: Re: StarNews RE: GenX, PFASs in the Cape Fear River watershed

Tried hard to put in plain English but some push back. I'll send on. Thanks.

Sent from my iPhone

On May 25, 2017, at 6:04 PM, Cleland-Hamnett, Wendy <Cleland-Hamnett.Wendy@epa.gov> wrote:

> Sounds factually correct.
>
> Wendy Cleland-Hamnett
> Acting Assistant Administrator
> Principal Deputy Assistant Administrator
> Office of Chemical Safety & Pollution Prevention
> U.S. Environmental Protection Agency
> 202-564-2910
> cleland-hamnett.wendy@epa.gov
>
> **From:** Strauss, Linda
> **Sent:** Thursday, May 25, 2017 4:46 PM
> **To:** Cleland-Hamnett, Wendy <Cleland-Hamnett.Wendy@epa.gov>; Wise, Louise <Wise.Louise@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>
> **Cc:** Schmit, Ryan <schmit.ryan@epa.gov>
> **Subject:** StarNews RE: GenX, PFASs in the Cape Fear River watershed
>
> See the aqua in #2 of the GenX questions. Some press last year characterized this as EPA allowing this as a substitute for C8, and that it's getting in water too.
>
> **2. *What is the status of EPA's review of the environmental and human safety of GenX? What is the EPA's current position regarding the safety of GenX?***
>
> **OCSPP Said:** EPA received the chemical substance referred to as GenX as a new chemical notice from DuPont (which is now Chemours) in 2008. The substance is a perfluoroether derivative. EPA and the company signed a Consent Order for the substance which required health and environmental testing, and also controlled worker exposures, environmental releases and the amount of impurities permissible in the final polymers. A Consent Order can require testing and restrictions as conditions.
> The Agency is analyzing the data it has received under the Consent Order.
>
> In its review of the GenX premanufacture submission, EPA determined that the chemical could be commercialized if there were no releases to water. Under the terms of the Consent Order,

for operations in the United States, DuPont is required to recover and capture (destroy) or recycle the chemical from all the process wastewater effluent streams and air emissions (point source and fugitive) at an overall efficiency rate of 99% (i.e., 99% of the chemical can't be released into the environment). Further, under the terms of the Consent Order, Dupont may only distribute the chemical to those customers, such as manufacturers and processers, that can also achieve this percentage of efficiency or destruction. An important next step is verifying the source of GenX in water.

OW Said: This is a starting point for a more appropriate answer (taken from last year's PFOA/PFOS HA roll out), but the agency now has a workgroup lead by ORD and OLEM and OW does not know its status. They will need to review and update or rewrite this answer to provide the current status, keeping in mind chemicals like GenX (I don't know if it's one of the PFAS they plan to assess):

The Agency is continuing to gather information about other PFAS [DOES THIS INCLUDE GenX?]. In addition, EPA plans to begin a separate effort to determine the range of PFAS for which an Integrated Risk Information System (IRIS) assessment is needed. The IRIS Program identifies and characterizes the health hazards of chemicals found in the environment. IRIS assessments inform the first two steps of the risk assessment process: hazard identification, and dose-response. As indicated in the 2015 IRIS Multi-Year Agenda, the IRIS Program will be working with other EPA offices to determine the range of PFAS compounds and the scope of assessment required to best meet Agency needs. More about this effort can be found athttps://www.epa.gov/iris/iris-agenda.

ORD Said: OW should provide the bulk of the answer to this question. NERL scientists provided a portion of the response to this question:
It is important to acknowledge that we determined that there are many other PFAS in the Cape Fear River and the finished drinking water. While we do not have analytical standards for most of these compounds, we can infer from these data that their concentrations are likely to be much higher than what we have reported for GenX. Figure 2 of the paper specifically illustrates that GenX only makes up a small percentage of the total PFAS that were determined in this study.

From: Jones, Enesta
Sent: Wednesday, May 24, 2017 10:25 AM
To: Sauerhage, Maggie <Sauerhage.Maggie@epa.gov>; Strauss, Linda <Strauss.Linda@epa.gov>
Cc: Strauss, Linda <Strauss.Linda@epa.gov>; Maguire, Megan <Maguire.Megan@epa.gov>; Hubbard, Carolyn <Hubbard.Carolyn@epa.gov>; Daguillard, Robert <Daguillard.Robert@epa.gov>; Jones, Enesta <Jones.Enesta@epa.gov>
Subject: RE: OCSPP + ORD: StarNews RE: GenX, PFASs in the Cape Fear River watershed

Hi All, OW has chimed in -- and in some instances, is deferring to ORD and OPPT. Please see below for the latest.

1. ***I'd like to know how someone in the community served by CFPUA should interpret these results, specifically in terms of the concentrations of GenX. According to the paper, median concentrations were 671 ppb. I'm asking this in the context of EPA's latest advisory level for PFOA/PFOS, which GenX is meant to replace. As I understand it, the advisory level for PFOA/PFOS is 70 ppt. GenX was present at several times that concentration. Does this raise any health concerns at all? Is this nothing to be concerned about?***

OW Said: To provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water, EPA has established the health advisory levels at 70 parts per trillion. See https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos. These health advisories are specifically for PFOA and PFOS and do not apply to other perfluoroalkyl substances (PFASs).

Health advisories provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA's health advisories are non-enforceable and non-regulatory and provide technical information to states agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

ORD Said:
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Given the relatively high concentrations of many PFAS that are closely related to PFOA/PFOS in surface and finished drinking water, the likelihood that exposures via consumption of drinking water have been continuing on a chronic basis for many years, and the fact that the limited toxicity data available for GenX indicate many similarities to PFOA, much more should be done to assess the potential risks that may be present.

2. *What is the status of EPA's review of the environmental and human safety of GenX? What is the EPA's current position regarding the safety of GenX?*

OCSPP Response: EPA received the chemical substance referred to as GenX as a new chemical notice from DuPont (which is now Chemours) in 2008. The substance is a perfluoroether derivative. EPA and the company signed a Consent Order for the substance which required health and environmental testing, and also controlled worker exposures, environmental releases and the amount of impurities permissible in the final polymers. A Consent Order can contain testing and restrictions as conditions.
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3. Has or will the EPA take any actions regarding the results from this paper?

Region 4 Said:

Since the paper was published, Region 4 has periodically reached out to the Town of Pittsboro. Pittsboro indicated that they had not initiated notification efforts to the sensitive population (as described in the Final Health Advisory).

Pittsboro indicated that they recently installed a 24/7 PAC Feed System, which is an effective treatment option for PFOA/PFOS. They also plan to conduct confirmatory sampling, which would provide results about the current PFOA/PFOS levels in the finished water. To date, Region 4 does not have any confirmatory sampling data for the Pittsboro community.

In December 2016, Region 4 reached out to the North Carolina Department of Health and Human Services (NC DHHS) to determine their awareness of the advisory and its recommendations. The Health Department acknowledged familiarity with the advisory but stated that they did not have authority to get involved. They stated they find the advisories difficult to implement at the state level, since they aren't regulated compounds.

Although Region 4 has confirmed that NC DEQ, NC DHHS and Town of Pittsboro are aware of the Final Health Advisory's recommendations, the sensitive population has not been notified in the Pittsboro community.

OW Said and ORD Reviewed?:

EPA is evaluating PFOA and PFOS as drinking water contaminants in accordance with the process required by the Safe Drinking Water Act (SDWA). To regulate a contaminant under SDWA, EPA must find that it: (1) may have adverse health effects; (2) occurs frequently (or there is a substantial likelihood that it occurs frequently) at levels of public health concern; and (3) there is a meaningful opportunity for health risk reduction for people served by public water systems.

EPA included PFOA and PFOS among the contaminants for which water systems are required to monitor under the third Unregulated Contaminant Monitoring Rule (UCMR 3) in 2012. Results of this monitoring effort can be found on the publicly-available National Contaminant Occurrence Database (NCOD). In accordance with SDWA, EPA will consider the occurrence data from UCMR 3, along with the peer reviewed health effects assessments supporting the PFOA and PFOS Health Advisories, to make a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation.

ORD struck this: In addition, EPA plans to begin a separate effort to determine the range of

Deliberative Process / Ex. 5

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Region 4 Said:

EPA has conducted monitoring in the Cape Fear River Watershed for perfluorinated compounds. At this time, Region 4 cannot advise on GenX compounds since the EPA does not have a drinking water advisory for these compounds. CARA SUGGESTS ALSO REFERRING TO ANSWER #3 WHEN IT'S FINALIZED.

5. The lead author has confirmed that the fluorochemical manufacturer located upstream of the CFPUA is a plant in Fayetteville, N.C., formerly owned by DuPont and now by Chemours. Has the EPA contacted the plant operator regarding these findings? If so, what was the nature of that communication? If not, why not?

Region 4 Said:

In 2006, Region 4 has conducted research of perflourinated compounds in the Cape Fear Watershed. At that time, our investigations did not show impacts of concern to surface water or groundwater; therefore, our office did not contact the plant operator.

Since the paper was published, Region 4 has not contacted the plant operator regarding the findings.

Enesta Jones
U.S. EPA
Office of Media Relations
Office: 202.564.7873
Cell: Personal Matters / Ex. 6

"The root of all joy is gratefulness."

On Wed, May 17, 2017 at 11:00 AM, Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>

From: Vaughn Hagerty [mailto:vaughn.hagerty@gmail.com]
Sent: Wednesday, May 17, 2017 9:43 AM
To: Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>
Subject: GenX, PFASs in the Cape Fear River watershed

Messrs. Lindstrom and Strynar:

My name is Vaughn Hagerty and I'm a journalist working on a story for the StarNews in Wilmington about PFASs, including GenX, in some drinking water systems in New Hanover and Brunswick counties. Among other sources, I'm referencing the paper "Legacy and Emerging Perfluoroalkyl Substances Are Important Drinking Water Contaminants in the Cape Fear River Watershed of North Carolina."

I've interviewed Professor Sun and am scheduled to

speak with Professor Knappe this week. I'd like to discuss the issue with one or both of you, as well, either by phone or via email exchange. Is this something we can arrange?

Regards,

Vaughn Hagerty